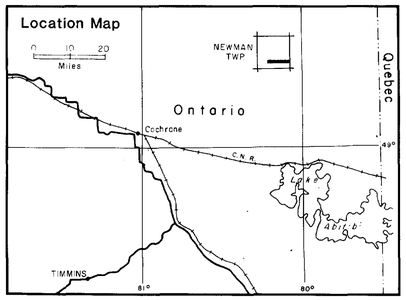


SHEET INDEX

NOTE: Values are in nanotesla above a datum of 58,000 nT

INSTRUMENT: Scintrex MP-2 total field magnetometer

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

- MAGNETIC SURVEY VALUES -

WEST SHEET

27706

Scale 1 : 5000

0 500 1000 1500 2000 feet

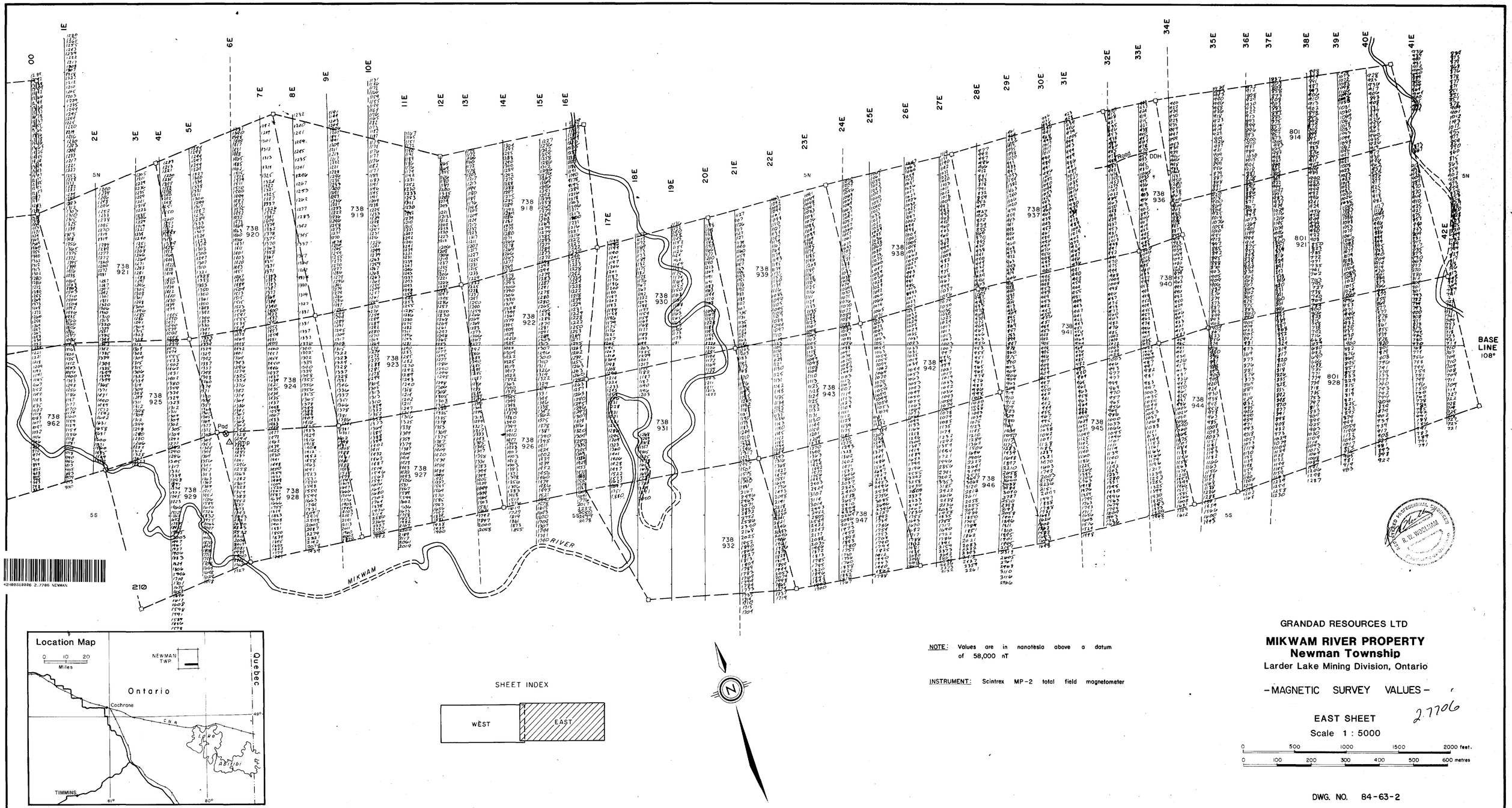
0 100 200 300 400 500 600 metres

DWG. NO. 84-63-1

OCTOBER 1984

200

Drawn by : R. T. Marcroft & Associates



SHEET INDEX

NOTE: Values are in nanotesla above a datum of 58,000 nT

INSTRUMENT: Scintrex MP-2 total field magnetometer

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

- MAGNETIC SURVEY VALUES -

EAST SHEET 2.7706

Scale 1 : 5000

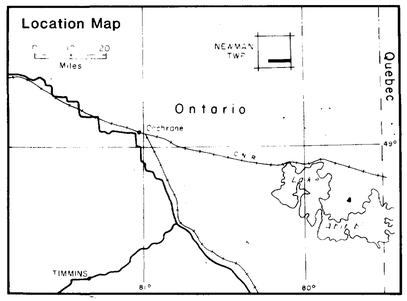
0 500 1000 1500 2000 feet.

0 100 200 300 400 500 600 metres

DWG. NO. 84-63-2

OCTOBER 1984

Drawn by : R. T. Marcroft & Associates



SHEET INDEX

LEGEND

Contours shown represent : Total magnetic field intensity above local background of 58,000 nT

Contour interval: 100 nanotesla below 2000
200 nanotesla above 2000

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

MAGNETIC SURVEY
CONTOUR MAP
WEST SHEET
Scale 1 : 5000

0 500 1000 1500 2000 feet
0 100 200 300 400 500 600 metres

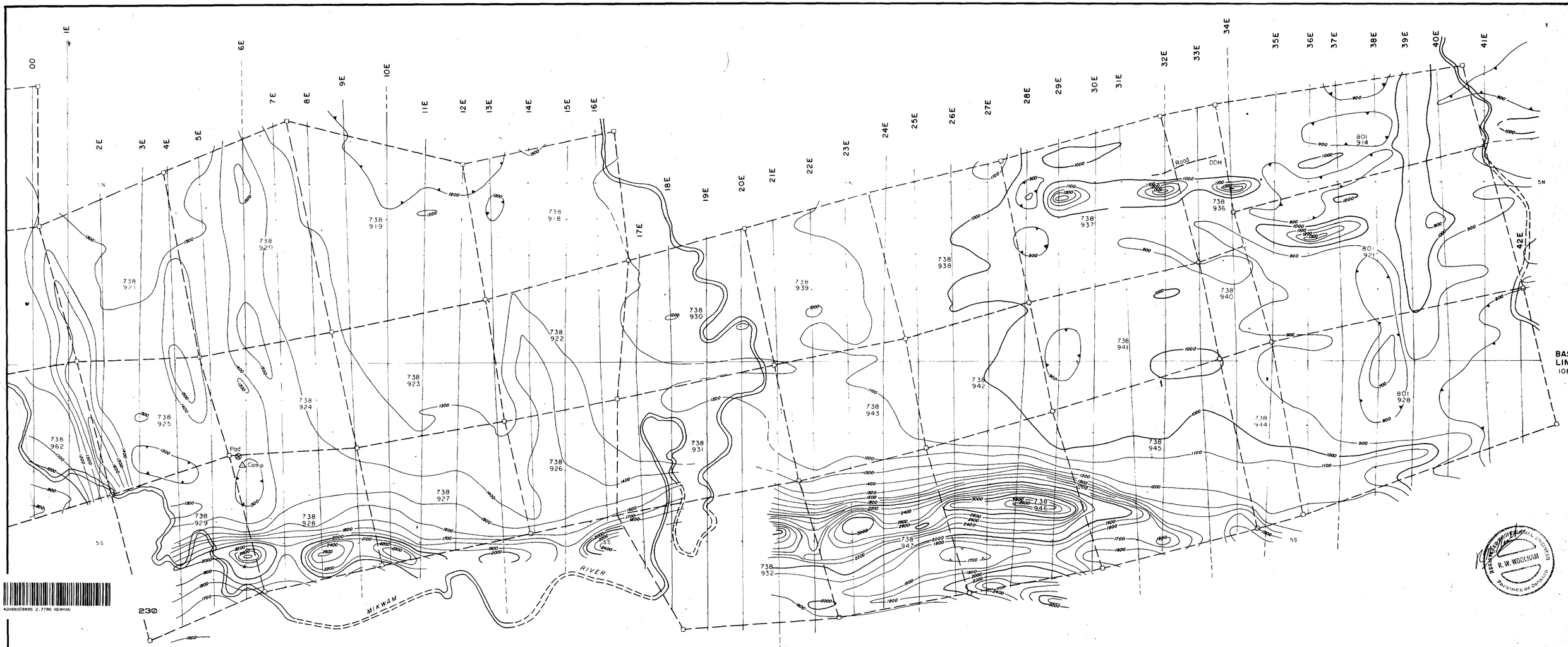
2.7706

DERRY, MICHENER, BOOTH & WAHL
DWG. NO. 84-63-3

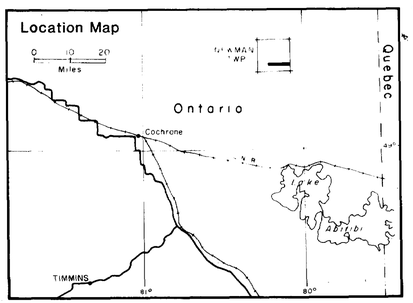
DRAWN BY : T. GRACE

REGISTERED PROFESSIONAL ENGINEER
A. R. ABDULHAK
PROVINCE OF ONTARIO

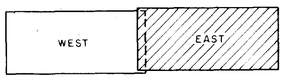
Drawn by : R. T. Marcroft & Associates



Location Map



SHEET INDEX



LEGEND

Contours shown represent:
Total magnetic field intensity above local background of 58,000 nT

Contour interval: 100 nanotesla below 2000
200 nanotesla above 2000

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

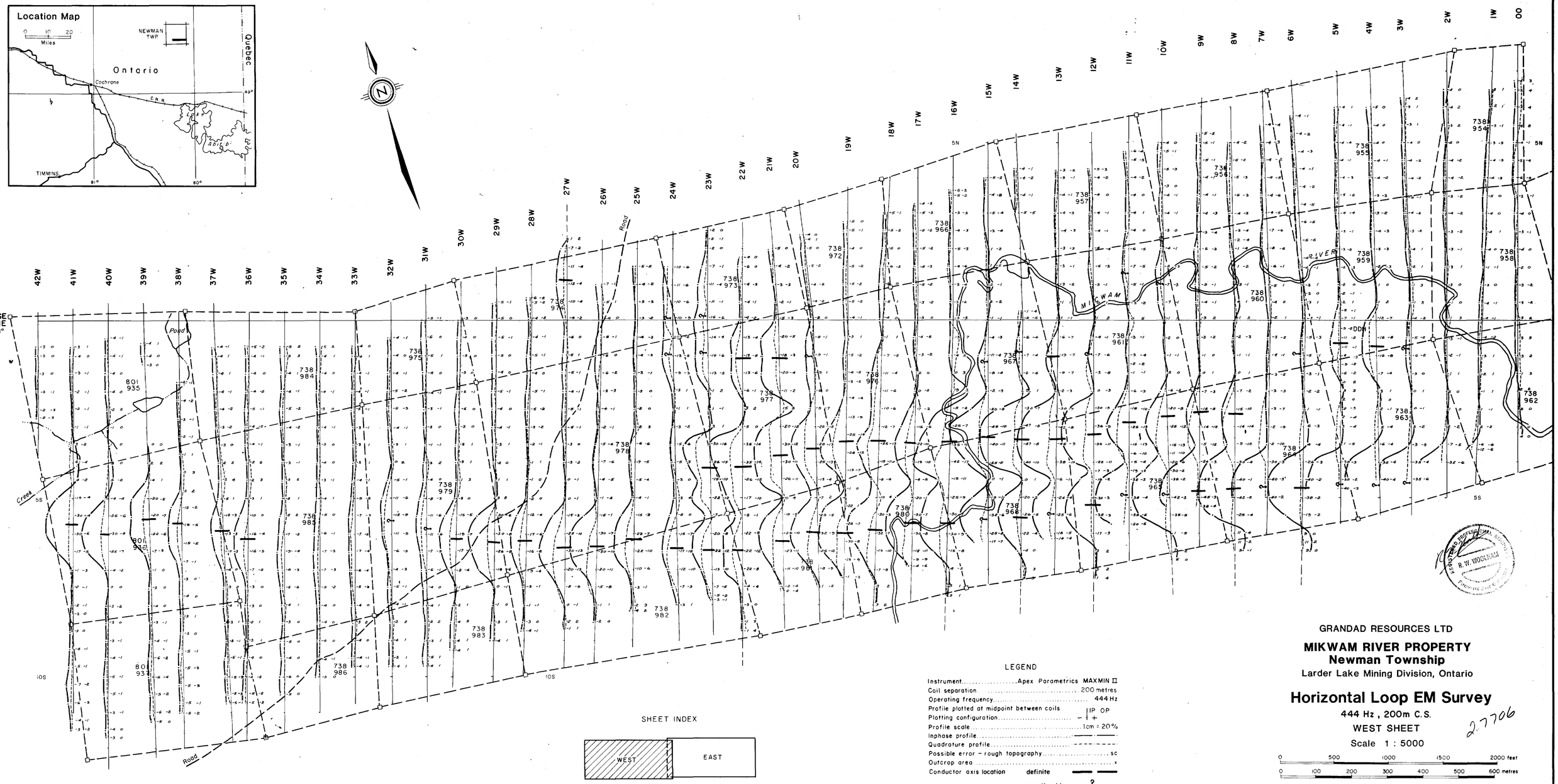
MAGNETIC SURVEY
CONTOUR MAP
EAST SHEET
2.7706
Scale 1 : 5000

0 500 1000 1500 2000 feet
0 100 200 300 400 500 600 metres

DERRY, MICHENER, BOOTH & WAHL
DWG. NO. 84-63-4

DRAWN BY: T. GRACE

Drawn by: R. T. Marcroft & Associates



SHEET INDEX

LEGEND

Instrument	Apex Parametrics MAXMIN II
Coil separation	200 metres
Operating frequency	444 Hz
Profile plotted at midpoint between coils	
Plotting configuration	IP OP − | +
Profile scale	1cm = 20%
Inphase profile	——
Quadrature profile	- - - -
Possible error – rough topography	sc
Outcrop area	x
Conductor axis location definite	——
questionable	?

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

Horizontal Loop EM Survey

444 Hz , 200m C.S.
WEST SHEET
Scale 1 : 5000

2.7706

0 500 1000 1500 2000 feet
0 100 200 300 400 500 600 metres

Survey Contractor:
WALKER EXPLORATION LTD.
Mississauga, Ontario
October 1984

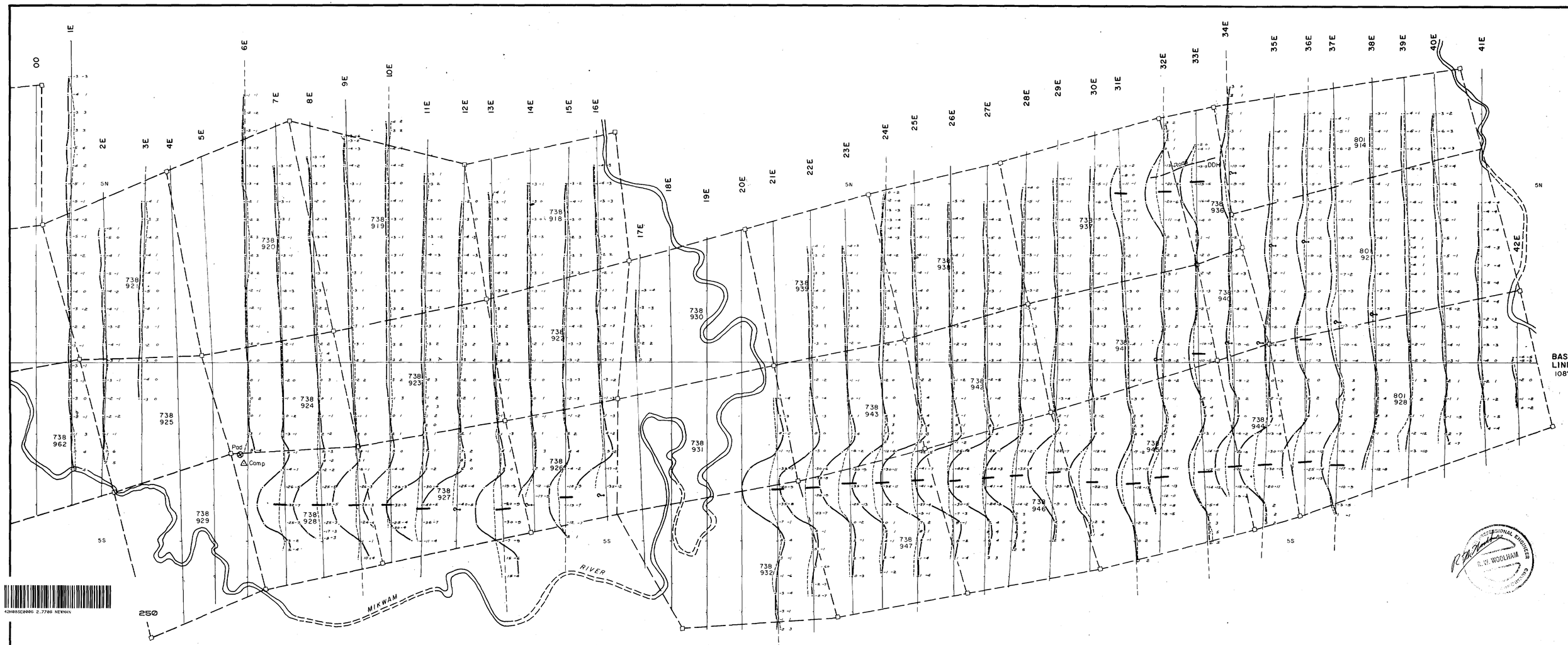
DWG. NO. 84-63-5

R. W. WOOLLACK

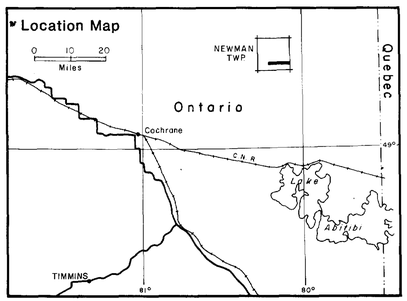
42H08SE0006 2.7706 NEWMAN

240

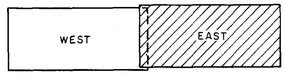
Drawn by : R. T. Marcroft & Associates



Location Map



SHEET INDEX



LEGEND

Instrument	Apex Parametrics MAXMIN II
Coil separation	200 metres
Operating frequency	444 Hz
Profile plotted at midpoint between coils	IP OP
Plotting configuration	− | +
Profile scale	1cm = 20%
Inphase profile	———
Quadrature profile	- - - - -
Possible error – rough topography	sc
Outcrop area	x
Conductor axis location definite	———
questionable	?

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

Horizontal Loop EM Survey
444 Hz , 200m C.S.

EAST SHEET

Scale 1 : 5000

2.7706

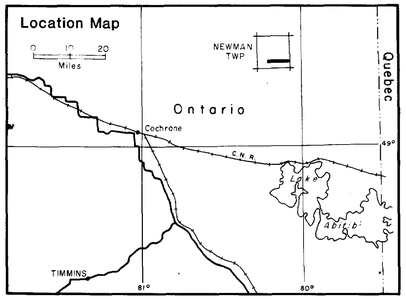
0 500 1000 1500 2000 feet

0 100 200 300 400 500 600 metres

Survey Contractor:
WALKER EXPLORATION LTD.
Mississauga, Ontario
October 1984

DWG. NO. 84-63-6

Drawn by : R. T. Marcroft & Associates



SHEET INDEX

LEGEND

Instrument	Apex Parametrics MAXMIN II
Coil separation	100 metres
Operating frequency	444 Hz
Profile plotted at midpoint between coils	IP OP
Plotting configuration	− | +
Profile scale	1cm = 20%
Inphase profile	——
Quadrature profile	- - - - -
Possible error – rough topography	sc
Outcrop area	x
Conductor axis location definite	——
questionable	?

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

Horizontal Loop EM Survey
444 Hz , 100m C.S.
WEST SHEET
Scale 1 : 5000

2 7706

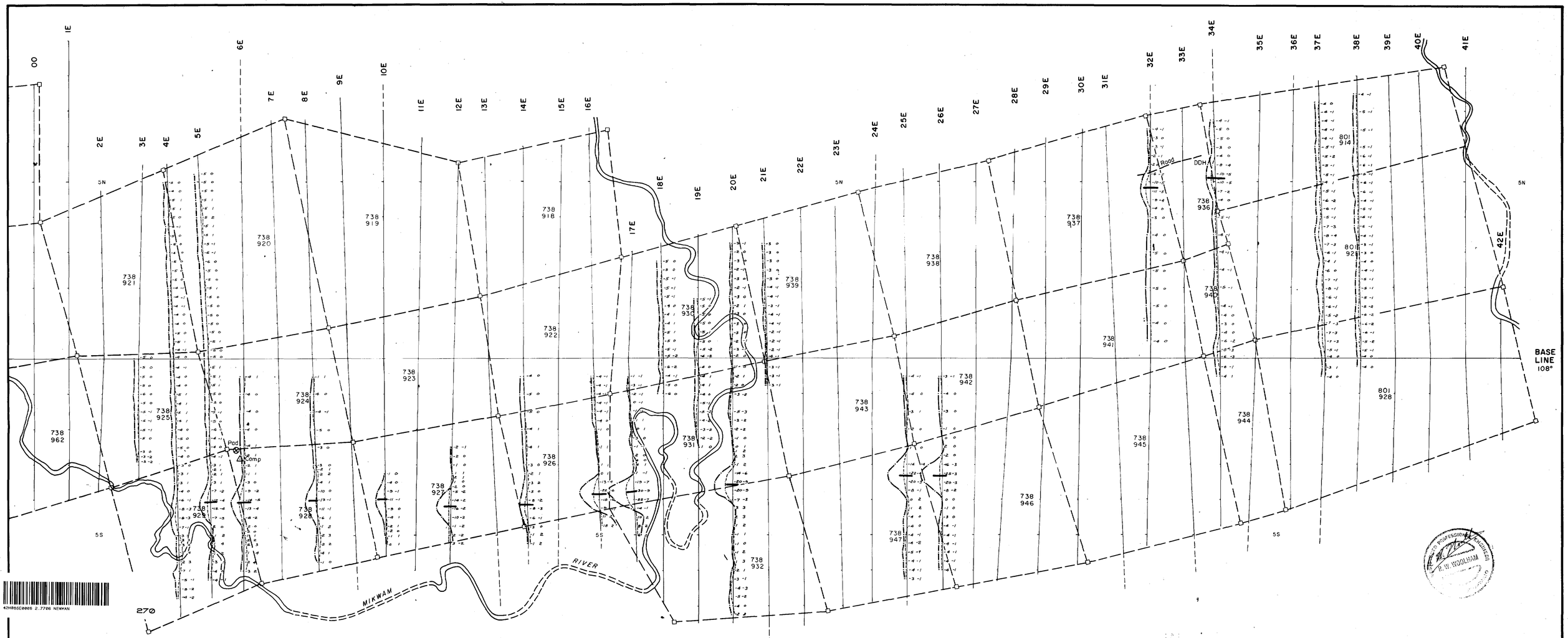
0 500 1000 1500 2000 feet
0 100 200 300 400 500 600 metres

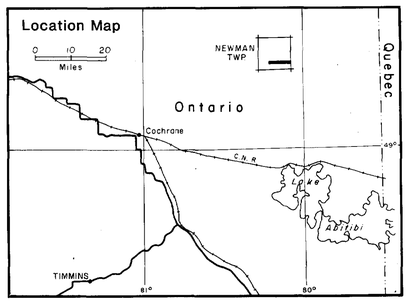
Survey Contractor:
WALKER EXPLORATION LTD.
Mississauga, Ontario
October 1984

DWG. NO. 84-63-7

260

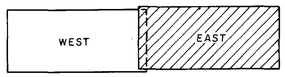
Drawn by : R. T. Marcroft & Associates





Drawn by : R. T. Marcroft & Associates

SHEET INDEX



LEGEND

Instrument	Apex Parametrics MAXMIN II
Coil separation	100 metres
Operating frequency	444 Hz
Profile plotted at midpoint between coils	IP OP
Plotting configuration	− | +
Profile scale	1cm = 20%
Inphase profile	——
Quadrature profile	- - - -
Possible error – rough topography	sc
Outcrop area	x
Conductor axis location definite	——
questionable	?

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

Horizontal Loop EM Survey

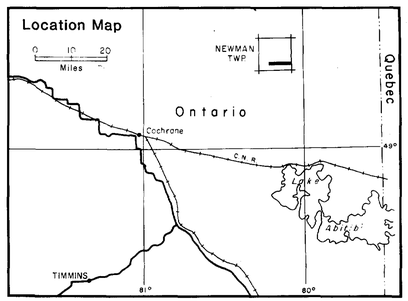
444 Hz , 100m C.S.
EAST SHEET
Scale 1 : 5000

2.7706

0 500 1000 1500 2000 feet
0 100 200 300 400 500 600 metres

Survey Contractor:
WALKER EXPLORATION LTD.
Mississauga, Ontario
October 1984

DWG. NO. 84-63-8



SHEET INDEX

LEGEND

Instrument	Apex Parametrics MAXMIN II
Coil separation	200 metres
Operating frequency	1777 Hz
Profile plotted at midpoint between coils	IP OP
Plotting configuration	− | +
Profile scale	1cm = 20%
Inphase profile	———
Quadrature profile	- - - - -
Possible error – rough topography	sc
Outcrop area	x
Conductor axis location definite	———
questionable	?

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

Horizontal Loop EM Survey

1777 Hz , 200m C.S.
WEST SHEET
Scale 1 : 5000

27706

0 500 1000 1500 2000 feet
0 100 200 300 400 500 600 metres

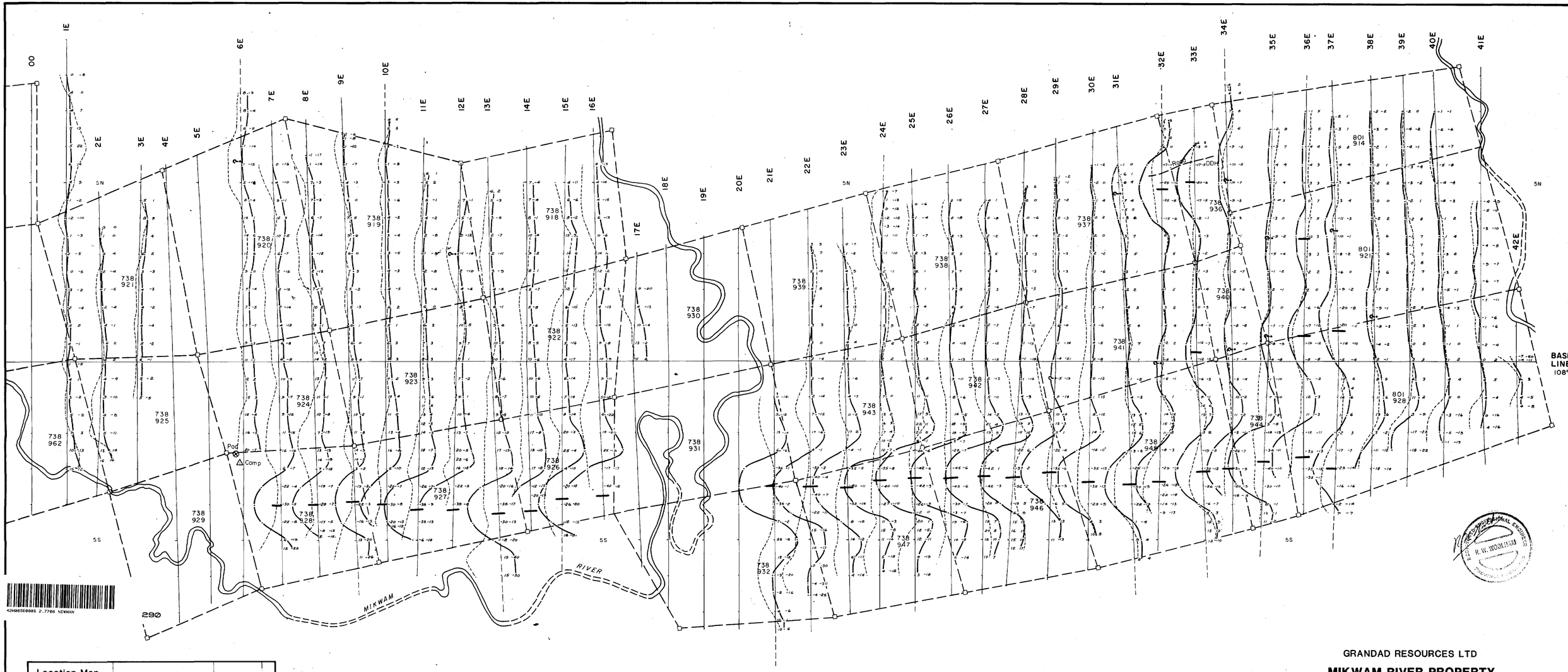
Survey Contractor:
WALKER EXPLORATION LTD.
Mississauga, Ontario
October 1984

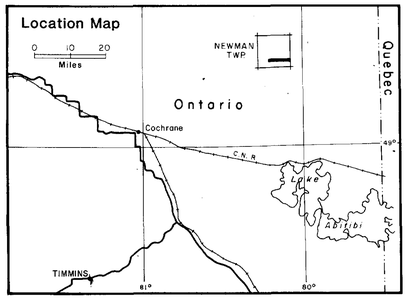
DWG. NO. 84-63-9

R. W. WOOLHAM — PROFESSIONAL ENGINEER

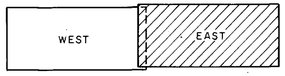
280

Drawn by : R. T. Marcroft & Associates





SHEET INDEX



LEGEND

Instrument	Apex Parametrics MAXMIN II
Coil separation	200 metres
Operating frequency	1777 Hz
Profile plotted at midpoint between coils	
Plotting configuration	IP OP
Profile scale	1cm = 20%
Inphase profile	
Quadrature profile	
Possible error – rough topography	sc
Outcrop area	x
Conductor axis location definite	
questionable	?

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

Horizontal Loop EM Survey

1777 Hz, 200m C.S.

EAST SHEET

2.7706

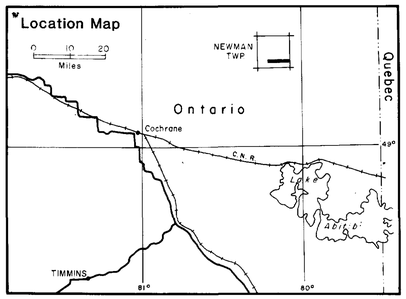
Scale 1 : 5000

0 500 1000 1500 2000 feet
0 100 200 300 400 500 600 metres

Survey Contractor:
WALKER EXPLORATION LTD.
Mississauga, Ontario
October 1984

DWG.NO. 84-63-10

Drawn by : R. T. Marcroft & Associates



SHEET INDEX

LEGEND

Instrument	Apex Parametrics MAXMIN II
Coil separation	100 metres
Operating frequency	1777Hz
Profile plotted at midpoint between coils	IP OP
Plotting configuration	− | +
Profile scale	1cm = 20%
Inphase profile	———
Quadrature profile	- - - - -
Possible error – rough topography	sc
Outcrop area	x
Conductor axis location definite	———
questionable	?

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

Horizontal Loop EM Survey

1777 Hz , 100m C.S.
WEST SHEET
Scale 1 : 5000

2-7706

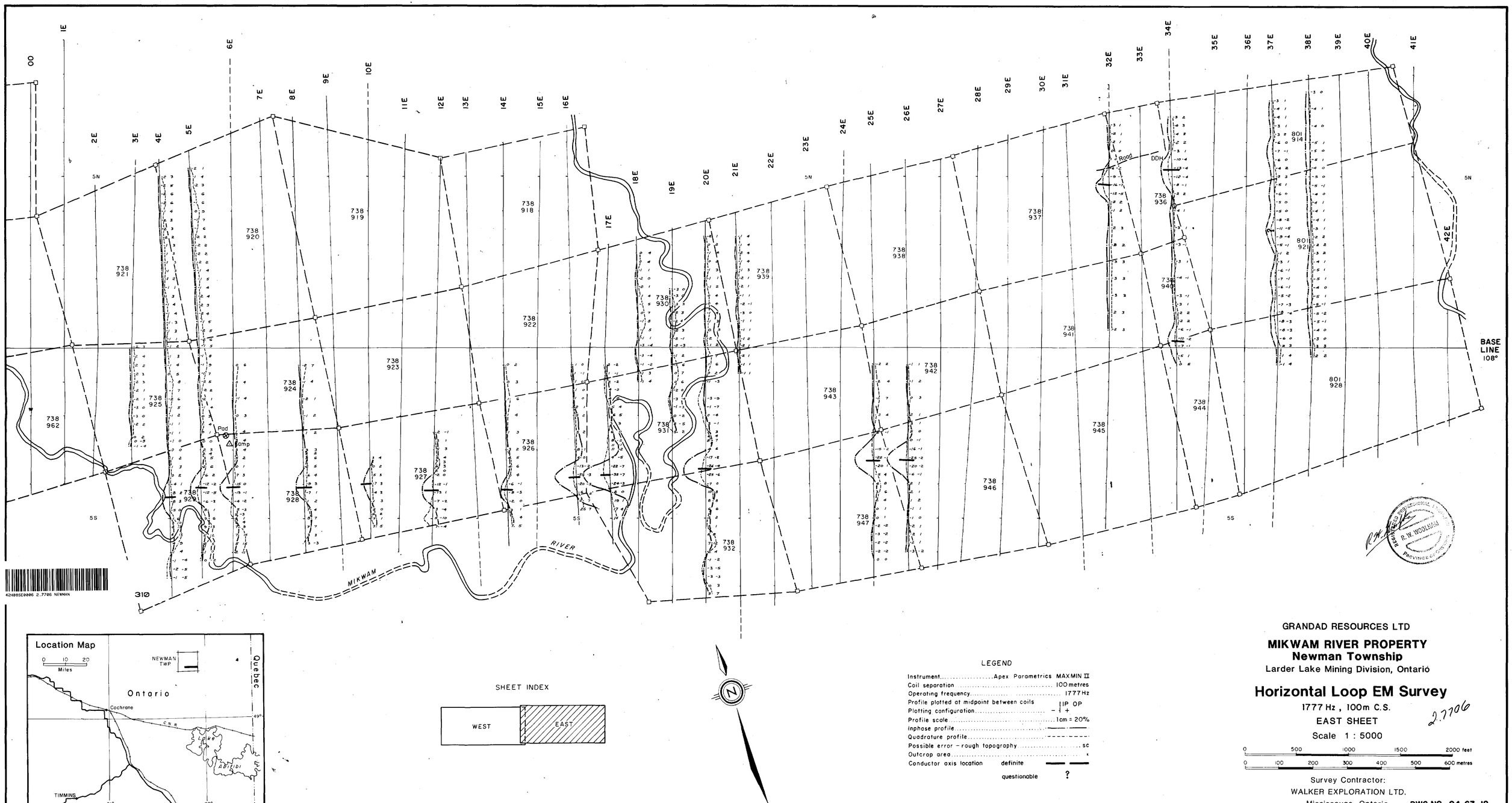
0 500 1000 1500 2000 feet
0 100 200 300 400 500 600 metres

Survey Contractor:
WALKER EXPLORATION LTD.
Mississauga, Ontario
October 1984

DWG. NO. 84-63-11

300

Drawn by : R. T. Marcroft & Associates



Location Map

SHEET INDEX

LEGEND

Instrument	Apex Parametrics MAXMIN II
Coil separation	100 metres
Operating frequency	1777 Hz
Profile plotted at midpoint between coils	IP OP
Plotting configuration	− +
Profile scale	1cm = 20%
Inphase profile	——
Quadrature profile	- - - - - -
Possible error – rough topography	sc
Outcrop area	
Conductor axis location definite	
questionable	?

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY

Newman Township

Larder Lake Mining Division, Ontario

Horizontal Loop EM Survey

1777 Hz , 100m C.S.

EAST SHEET

2.7706

Scale 1 : 5000

0 500 1000 1500 2000 feet

0 100 200 300 400 500 600 metres

Survey Contractor:

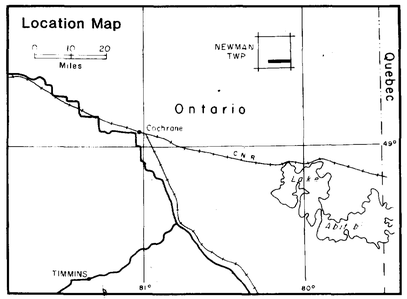
WALKER EXPLORATION LTD.

Mississauga, Ontario

DWG.NO. 84-63-12

October 1984

Drawn by : R. T. Marcroft & Associates



SHEET INDEX

LEGEND

EM TRENDS
- (a) definite
- (b) possible
- (c) 100m coil separation

Designated conductive horizons

Magnetic trends

Probable iron formation horizon

Probable diabase dykes

Fold / Fault breaks and designation

Target areas recommended for further investigation

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

INTERPRETATION COMPILATION

WEST SHEET

2.7706

Scale 1 : 5000

0 500 1000 1500 2000 feet

0 100 200 300 400 500 600 metres

DERRY, MICHENER, BOOTH & WAHL

JANUARY, 1985

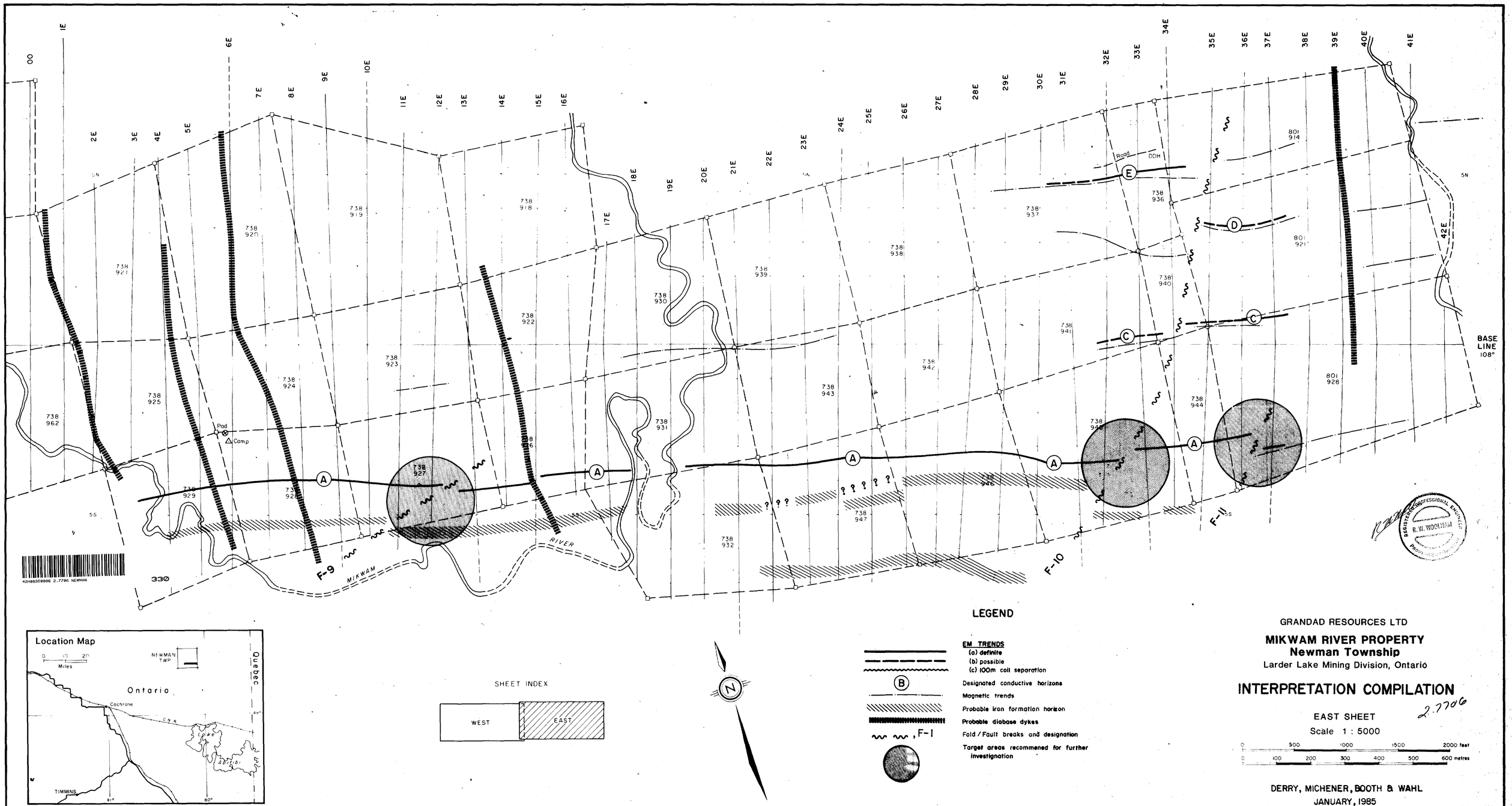
DWG NO. 84-63-13

DRAWN BY: L.COLLINS

REGISTERED PROFESSIONAL ENGINEER R. W. WOOLLINGS PROVINCE OF ONTARIO

320

Drawn by: R. T. Marcroft & Associates



Location Map

SHEET INDEX

LEGEND

EM TRENDS
(a) definite
(b) possible
(c) 100m coil separation

Designated conductive horizons

Magnetic trends

Probable iron formation horizon

Probable diabase dykes

Fold / Fault breaks and designation

Target areas recommened for further investigation

GRANDAD RESOURCES LTD

MIKWAM RIVER PROPERTY
Newman Township
Larder Lake Mining Division, Ontario

INTERPRETATION COMPILATION

EAST SHEET
Scale 1 : 5000

2.7706

0 500 1000 1500 2000 feet
0 100 200 300 400 500 600 metres

DERRY, MICHENER, BOOTH & WAHL
JANUARY, 1985
DWG. NO. 84-63-14

DRAWN BY: L.COLLINS

Drawn by : R. T. Marcroft & Associates

REPORT ON THE GEOPHYSICAL SURVEYS

MIKWAM RIVER PROPERTY,

NEWMAN TOWNSHIP, ONTARIO

NTS 42 H/8

FOR GRANDAD RESOURCES LTD.

DERRY, MICHENER, BOOTH & WAHL

R. W. Woolham, P.Eng.

REF.: 84-63

December 31, 1984
Toronto, Canada

TABLE OF CONTENTS

LIST OF MAPS

SUMMARY

Geophysical surveys, consisting of 100 line kilometers of magnetometer survey and 115 line kilometers of electromagnetic survey, have been performed on the Mikwam River property. The work was designed to identify a possibly auriferous volcano-sedimentary iron formation/conductive horizon, which has a strike length of 8 kilometers within the property boundaries.

The surveys identified a probable iron formation trending east-west along the south boundary of the property. Paralleling this horizon, approximately 100 metres to the north, is a conductive horizon. This horizon was tested by one drill hole, which intersected trace amounts of gold. Shorter, less continuous, conductive horizons, with paralleling or coincident magnetic associations, occur north of the main conductive trend. There are several cross cutting magnetic anomalies thought to represent diabase dyke sources, which are ubiquitous throughout the Shield greenstone belts. Numerous magnetic and electromagnetic trend displacements and interruptions have been interpreted to indicate fold/fault breaks. A total of 11 such structures have been identified on an interpretation compilation map. Three of these structures represent major cross cutting features. In addition, an area that may reflect alteration characteristics, such as magnetite depletion, is suggested at one location along the iron formation horizon.

It is recommended that the through-going conductor, designated as "A", be investigated further, especially where major cross cutting fold/fault breaks are present. Such target areas are shown as circles on the interpretation map and are listed as follows:

Approximate Location			
Line No.	Station	Associated Fold/Faults	Priority
36W	650S	F-1	2
31W	650S	F-2/F-3	1
25W	650S	F-4	1
20W	600S	F-5	1
16W	550S	F-6	2
12E	400S	F-9	2
32E	300S	F-10	1
36E	300S	F-11	2

Horizon B, on the west sheet, is also recommended for investigation on a lower priority basis. The remaining conductive-magnetic zones all have potential for base metal mineralization.

A program of geochemical basal sediment sampling and/or trenching in shallow overburden areas is probably the best method to investigate the targets listed.

INTRODUCTION

Geophysical ground surveys have been completed on behalf of Grandad Resources Ltd. on the Mikwam River property, Newman Township, Province of Ontario. A potentially prospective auriferous geological horizon was identified from regional geological and airborne geophysical information, as well as local ground surveys and drilling results performed in previous years. The horizon trends through the claim group. The ground geophysical survey program was designed to delineate the horizon of interest more accurately and to facilitate the planning of a bedrock sediment sampling program.

The surveys utilized the magnetic and electromagnetic method. The magnetic survey was completed by R. Moore, a private contractor, while the electromagnetic survey was performed by Walker Exploration Ltd. Mr. F. Sharpley, a geological consultant, was in charge of the overall exploration program and consulted with the author regarding survey specifications prior to the beginning of the survey. The surveys were conducted during the period October 10 to November 2, 1984. This report describes the results of these surveys.

PROPERTY LOCATION AND ACCESS

The property is located 72 km northeast of Cochrane, Ontario in Newman Township. It is 48 km north of Lake Abitibi and 40 km west of the Ontario-Quebec border. The Cochrane-Detour highway passes the area approximately 16 km to the northwest. The area is accessible by helicopter from Cochrane. A location map is shown on each survey map.

PROPERTY DESCRIPTION

The property consists of 63 contiguous claims, as shown in Figure 1 and numbered as follows:

L738918 to L378932, inclusive

L738936 to L738947, inclusive

L738954 to L738968, inclusive

L738972 to L738986, inclusive

L801914, L801921, L801928

L801935 to L801937, inclusive

The claims lie in the James Bay Lowlands, which are characterized by low-lying swampy spruce covered areas. There is very little outcrop exposure in the area.

EXPLORATION HISTORY

Geophysical surveys and drilling were completed by Noranda and Dome in 1974 and 1975, respectively. Noranda explored a small portion of the western part of the present claim group. One 108 m borehole tested a conductive horizon delineated by the geophysics.

Dome Exploration Ltd. also used geophysical surveys to identify drill targets, which were tested by two boreholes totalling 209 m. This work was done on the extreme eastern part of the property. The work programs by Noranda and Dome were designed to explore for massive base metal sulphide deposits.

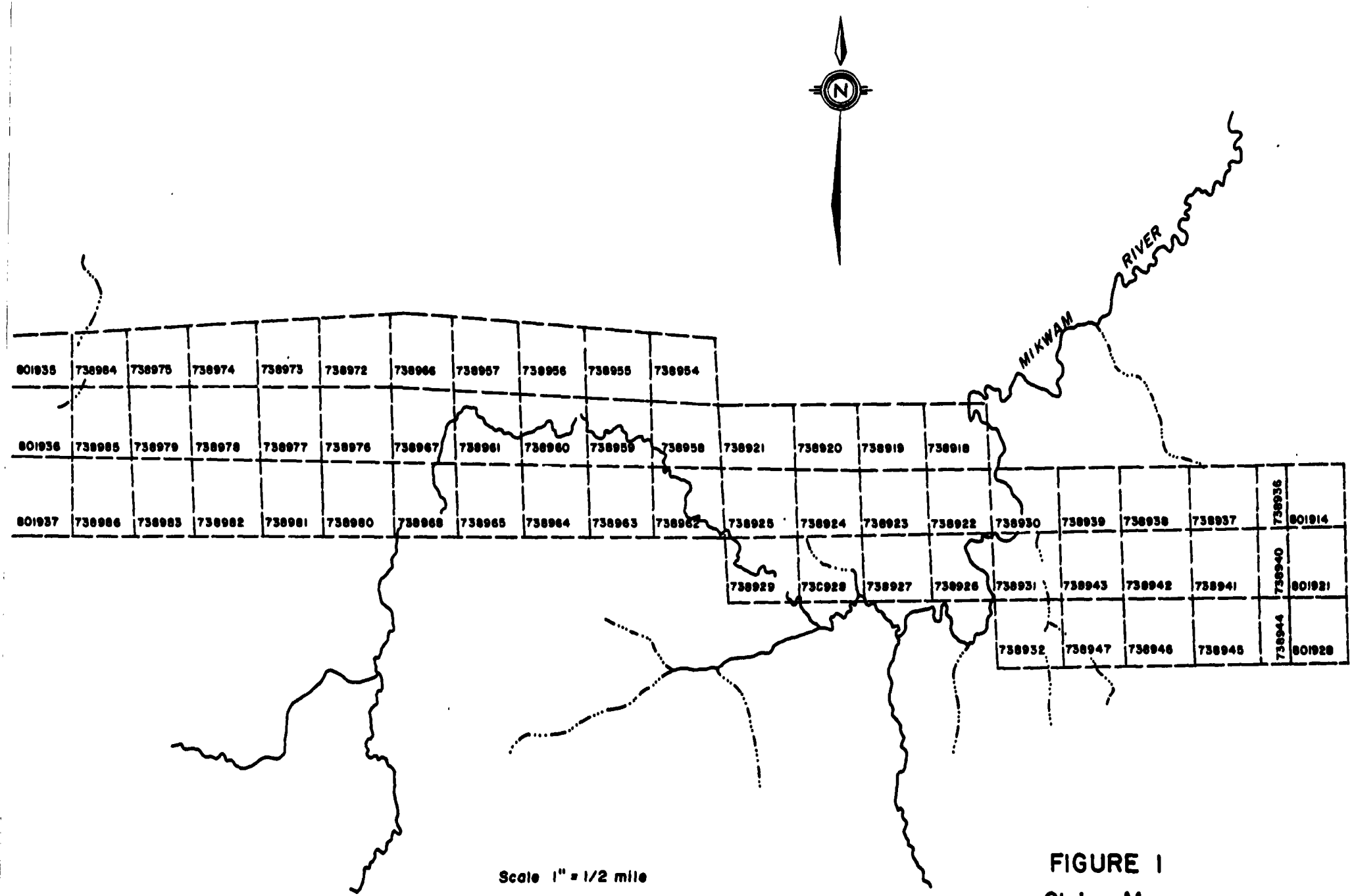


FIGURE 1
Claim Map

GEOLOGY AND MINERALIZATION

The property lies within the central Abitibi Greenstone Belt, which stretches from Chibougamau, Quebec to Timmins, Ontario, a distance of 500 km. The belt is a major feature of the Superior structural Province of the Canadian Shield. The rocks consist of volcanics, volcano-sedimentary assemblages and basic and felsic intrusives, all cut by diabase dykes.

The claim group is located within a volcano/sedimentary contact zone. Outcrop is sparse to nonexistent, but the three boreholes in the area provide some information on the underlying bedrock. At the western end of the claim group, the Noranda borehole intersected extensively altered chloritic and sericitic volcanics and amphibolite with pyrite and pyrrhotite. At the extreme east end of the property, one hole intersected 35 m of pyritic dacite tuff containing trace to .005 oz. Au per ton. This section was at the interface between intermediate to basic volcanics and graphitic sediments. A second hole to the north intersected felsic to intermediate tuff. These two holes were drilled by Dome Exploration Ltd.

SURVEY PARAMETERS AND PRESENTATION

Magnetic Survey

A Scintrex MP 2 proton magnetometer was used for the survey. Instrument specifications are contained in Appendix I. Magnetic diurnal variations were monitored by looping into pre-determined base stations at intervals of less than one and one half hours. Readings were taken along grid lines spaced 100 metres apart

at 12.5 metre station intervals. Approximately 100 line kilometres of data were recorded in this way.

Corrections to the magnetic field values recorded during the field survey were then made using the appropriate time and diurnal change information. A regional value of 58,000 nanotesla (nT) was subtracted from all the corrected magnetic values. The values were then plotted at a scale of 1:5000 and contoured at an interval of 100 nT. The survey grid has been drafted on two sheets; an east sheet and a west sheet. A separate magnetic value and magnetic contour map was produced for each sheet (see sheets 84-63-1 to 4, inclusive).

Electromagnetic Survey

The electromagnetic instrument was an Apex Parametrics Ltd. MaxMin unit. Instrument specifications are contained in Appendix I. A transmitter/receiver coil spacing of 200 metres was used for the survey, with a station reading interval of 50 metres. Survey lines were 100 metres apart. Accurate leveling of the coils was monitored at each station and correct coil distance was maintained using the picket line chainages. The in-phase and quadrature readings at frequencies of 444 Hz and 1777 Hz were measured at each station. Subsequently, detail work using a 100 m coil spacing, 25 m station spacing, and the same frequency pair, was completed over selected conductive areas on 25 lines. A total of 115 line kilometres of two frequency survey data were collected in this manner.

The values were plotted on maps at a scale of 1:5000 and profiles of the in-phase and quadrature responses were drawn. The in-phase and quadrature values

are shown as solid and dashed profile lines, respectively (see sheets 84-63-5 to 84-63-12, inclusive).

RESULTS

Magnetic Survey

The regional magnetic background across three quarters of the total claim block is constant at approximately 59,200 nanotesla (nT). In the eastern quarter of the area surveyed, the regional magnetic field is not constant but decreases gradually from west to east at a rate of about 100 nT every 500 metres. The magnetic feature that predominates across the whole east-west length of the claim group is a sinuous, consistent, narrow magnetic anomaly having amplitudes ranging from 1,000 to over 8,000 nT above background. A second horizon occurs 200 metres south and parallel with the aforementioned feature. This second zone is only delineated in the extreme east and west ends of the property where grid lines extend far enough south to traverse the anomaly.

North of the main magnetic east-west trending horizon, there are two distinct magnetic signatures. The one anomaly type consists of east-west narrow linears having amplitudes of 100 to 500 nT above background, and in some instances, exceeding 1,000 nT in isolated locations. These linears generally extend for distances from 200 to 800 metres. They are most prominent in two areas: from lines 28E to 38E in the east part of the grid, and from line 11W to line 28W in the western part of the grid. They appear to represent three main horizons having variable continuity

and some degree of local north-south displacement along their east-west strike lengths.

The second type of magnetic signature is represented by north-south linears having amplitudes usually in the range of several hundred nT. These anomalies are difficult to recognize in areas where they are cross cutting east-west features as they nearly parallel the survey line directions. More definite indications of these features are seen at line 38W, 1E, 6E, 14E and 39E. In these areas, the flanks of the north-south trending anomalies are broad enough to be seen on adjacent lines, thus producing a more obvious trend direction.

Electromagnetic Survey

The horizontal loop responses from conductive sources on the property all have common properties of narrow width, of medium to good conductivity width values of 10 to over 70 mhos, and east-west linear trend directions across the grid. Estimated depth and conductivity-width values are generally lower for the higher frequency 1,777 Hz data than for the lower frequency 444 Hz data. Calculated depth to the sources of the conductive trends varied between 20 metres and 70 metres. The higher depth values, where they were estimatable, occur in the east-central part of the grid.

The major conductive response seen on the property consists of one long linear anomaly feature, which stretches across the length of the grid and parallels the long east-west magnetic feature discussed earlier. The conductor is about 100 metres north of the magnetic horizon. It is not completely delineated along its

full strike length, as full survey coverage is not available. Its continuity is implied from its association with the magnetic trend just to the south.

The remaining conductors are located to the north of the major conductive zone forming two distinct response areas. These conductive areas generally match the same areas where the short east-west magnetic linears are most prolific, i.e. from line 28E to 38E and from lines 11W to 28W. Many of the conductors have strike lengths of a few hundred metres. Some minor line to line displacement is evident in a few locations. As with the magnetic trends, the conductive trends form roughly three horizons, which are either closely associated with or coincident with the magnetic horizons in most instances. The central-east half of the grid is devoid of any conductive trends, other than the main zone, occurring near the south property boundary.

CONCLUSIONS AND DISCUSSION

In order to more easily assimilate and discuss the geophysical results, the magnetic and conductive trends have been assembled into an interpretation compilation, as shown on maps 84-63-13 and 14. These maps show the geophysical trends and their interpreted source, where applicable, as well as fold/fault breaks. The latter structures represent an axis along which either folding or faulting may have occurred based on anomaly trend inflections and displacements. The fold/fault breaks have been given letter-number designations and the conductive trends given letter only designations. An attempt has been made to interpret the apparent continuity of the various conductive horizons along their strike. Thus, the horizon designated as "A", which trends across the whole property, is felt to represent the

same stratigraphic source along its whole strike length. Similarly, those conductive trends designated as "B" are felt to be geologically related to each other along their strike length.

The most obvious magnetic feature is the long horizon trending along the south boundary of the claims. This anomaly has been designated as a probable iron formation horizon. Enough of the zone was traversed at the east and west ends of the grid to show that a second weaker horizon is present to the south of the main zone. The main zone itself is generally monotonously continuous along most of its strike length, except for a few slight displacements. The exceptions to this observation are worth noting. At the west end of the zone between structures F-2 and F-3, the horizon is interrupted quite significantly. This could represent a zone of magnetite depletion. It is just to the west of two magnetic north-south features interpreted as diabase dyke sources. These dykes parallel features F-2 and F-3. In the extreme east, the horizon dissipates and appears to be displaced south by structure F-10. Structure F-10 represents a major feature related to anomaly trend displacements further to the north. Major cross cutting structures, such as F-10, may have some significance for gold mineralization and, therefore, structures such as F-4 and F-5 as well as F-10 are worth considering for further investigation.

Conductive trend "A" closely parallels the iron formation source magnetic horizon just to the south. Exceptions occur at the east and west ends of the conductor west of F-3 and east of F-10. These areas represent major trend interruptions and have been recommended for further investigation above. Note that the conductor "A" portion, just east of structure F-10, was drilled by Dome. This was the borehole which contained the trace gold results.

Conductive trend "B" has excellent continuity in the west half of the property, but is not traceable with any confidence further east. It has an apparent strike length, with interruptions, of over 1½ km. Note that this conductor and the remaining conductors paralleling it to the north have either coincident or closely associated magnetic responses. The magnetic responses are intermittent but specific horizons appear to be traceable for several hundreds of metres. Conductive horizons "C", "D" and "E" have poorer continuity than conductor "B" having local individual strike lengths of only a few hundred metres. Horizon C, just east of structure F-8, was drilled by Noranda. The pyrite and pyrrhotite encountered in the hole probably represents the source of the electromagnetic/magnetic anomaly in this particular location. Conductor "E" at the extreme east end of the property was drilled by Dome. This hole also intersected significant amounts of pyrite and pyrrhotite in addition to traces of base metal mineralization. It is suggested that conductive horizons "B", "C", "D" and "E" all reflect similar geological environments consisting of intermediate to felsic volcanics and tuffs containing pyrite, pyrrhotite and some graphite. The geological assemblage probably becomes more tuffaceous progressing southwards and probably is intercalated with predominately sedimentary units of argillites and greywackes near the interpreted iron formation interface.

The lack of conductive and magnetic trends north of conductor "A" between lines 31E and zero is most probably the effect of deeper overburden burial of the underlying sources. The response from short strike length conductors attenuates rapidly with depth of burial. Conductor "A", having better continuity, is still detectable although a deeper depth of burial was indicated from depth calculations. The magnetic responses from the interpreted north-south diabase dykes on 6E and 14E are very broad also confirming a thicker overburden cover in this area.

RECOMMENDATIONS

Based on the available information to date, horizon A is recommended for detailed geological and geochemical investigations. Prime gold exploration target areas are thought to be related to major fold/fault structures and/or areas of possible magnetite depletion. Prime target areas occur in those locations intersected by conductive horizon "A" and structures F-2/F-3, F-4, F-5 and F-10. Secondary target areas are located where structures F-1, F-6, F-9 and F-11 intersect conductive horizon "A".

The continuity of horizon "B" suggests that it may be a repeated sequence of "A" or have some localized relationship to the sedimentary/volcanic interface. Investigation of this horizon on a second priority basis is recommended. The remaining conductive horizons all have potential for base metal mineralization. Further testing of these conductors is definitely recommended. On the west end of the property, where most of these latter conductors are clustered, the magnetic responses suggest that overburden cover could be very thin. Soil geochemical sampling and/or trenching may be practical investigation techniques in these areas.

CERTIFICATE OF QUALIFICATIONS

I, Roderick W. Woolham of the town of Pickering, Province of Ontario, do hereby certify;

(1) That I am a geophysicist and reside at 1463 Fieldlight Blvd., Pickering, Ontario, L1V 2S3.

(2) That I graduated from the University of Toronto in 1961 with a degree of Bachelor of Applied Science, Engineering Physics, Geophysics Option.

(3) That I am a member in good standing of the following organizations: The Association of Professional Engineers of the Province of Ontario (Mining Branch); Society of Exploration Geophysicists; South Africa Geophysical Association.

(4) That I have been practising my profession for a period of more than 20 years.

(5) That I am an Associate with Derry, Michener, Booth & Wahl, Consulting Geologists and Engineers.

(6) That I personally was involved with the technical supervision of the survey and wrote the report.

(7) That I have no direct or indirect interest or expect to receive any in the properties or securities of Grandad Resources Ltd. or any affiliate.

(8) Permission is given to use this report for assessment and/or qualification requirements.

R. W. Woolham
B.A.Sc., P.Eng.

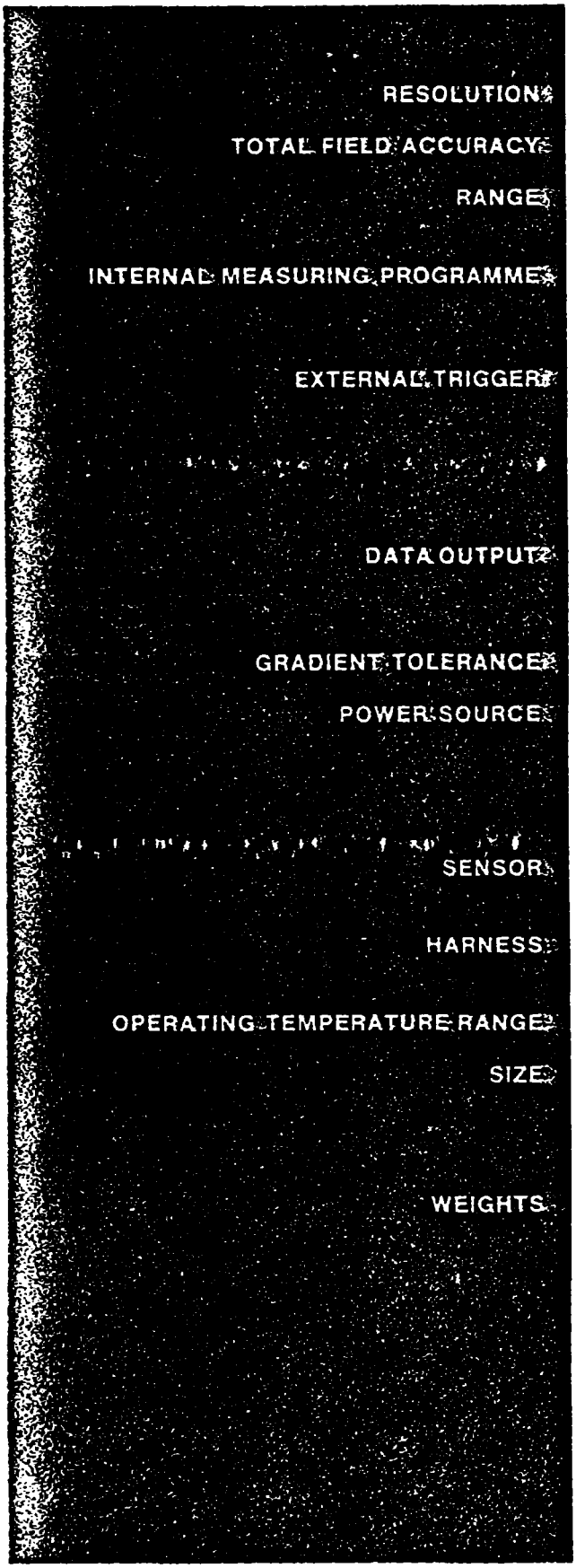
Toronto, Canada
December 31, 1984

APPENDIX I

INSTRUMENT SPECIFICATIONS

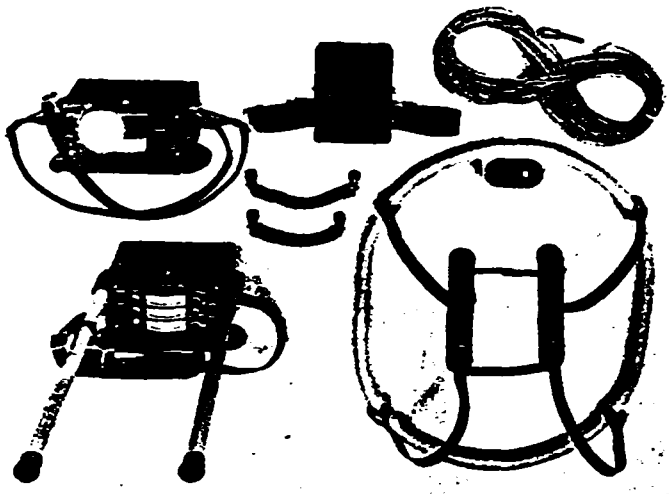
TECHNICAL DESCRIPTION OF MP-2 MAGNETOMETER

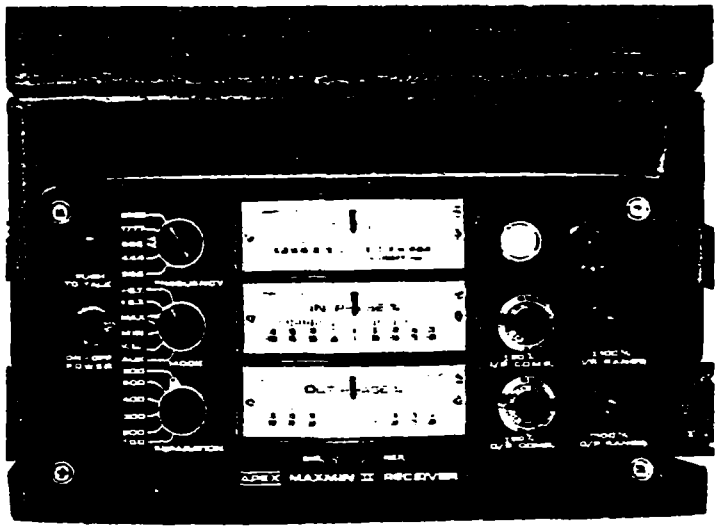
SCINTREX



RESOLUTION:	1 Gamma.
TOTAL FIELD ACCURACY:	± 1 Gamma over full operating range.
RANGE:	20,000 to 100,000 gammas in 25 overlapping steps.
INTERNAL MEASURING PROGRAMMES:	Single reading — 3.7 seconds. Recycling feature permits automatic repetitive readings at 3.7 seconds intervals.
EXTERNAL TRIGGER:	External trigger input permits use of sampling intervals longer than 3.7 seconds.
	5 digit LED (Light Emitting Diode) readout displaying total magnetic field in gammas or normalized battery voltage.
DATA OUTPUT:	Multiplied precession frequency and gate time outputs for base-station recording using interfacing optionally available from Scintrex.
GRADIENT TOLERANCE:	Up to 5000 gammas/metre.
POWER SOURCE:	8 alkaline "D" cells provide up to 25,000 readings at 25° C under reasonable signal/noise conditions (less at lower temperatures). Premium carbon-zinc cells provide about 40% of this number.
SENSOR:	Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance.
HARNESS:	Complete for operation with staff or back pack sensor.
OPERATING TEMPERATURE RANGE:	−35°C to +60°C.
SIZE:	Console, with batteries: 80 x 160 x 250mm. Sensor: 80 x 150mm. Staff: 30 x 1550mm. (extended) 30 x 600 mm. (collapsed)
WEIGHTS:	Console, with batteries: 1.8kg. Sensor: 1.3kg. Staff: 0.6kg.

SCINTREX LIMITED
222 Snidercroft Road,
Concord, Ontario, Canada L4K 1B5
TELEPHONE (416) 669-2280. TELEX 06-964570





SPECIFICATIONS :

Frequencies: 222, 444, 888, 1777 and 3555 Hz.

Modes of Operation:
- MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with reference cable.
- MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.
- V.L. : Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.

Coil Separations: 25, 50, 100, 150, 200 & 250m (MMII) or 100, 200, 300, 400, 600 and 800 ft. (MM II F).
Coil separations in V.L. mode not restricted to fixed values.

Parameters Read:
- In-Phase and Quadrature components of the secondary field in MAX and MIN modes.
- Tilt-angle of the total field in V.L. mode.

Readouts:
- Automatic, direct readout on 90 mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary.
- Tilt angle and null in 90 mm edgewise meters in V.L. mode.

Scale Ranges:
- In-Phase: ±20%, ±100% by push-button switch.
- Quadrature: ±20%, ±100% by push-button switch.
- Tilt: ±75% slope.
- Null (V.L.): Sensitivity adjustable by separation switch.

Readability: In-Phase and Quadrature: 0.5 %.
Tilt : 1%

Repeatability: ± 0.5% to ±1% normally, depending on conditions, frequencies and coil separation used.

Transmitter Output:
- 222 Hz : 175 Atm^2
- 444 Hz : 160 Atm^2
- 888 Hz : 100 Atm^2
- 1777 Hz : 60 Atm^2
- 3555 Hz : 30 Atm^2

Receiver Batteries: 9V trans. radio type batteries (4). Life: approx. 35 hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.

Transmitter Batteries: 12V 7.5Ah Gel-Cell rechargeable batteries (2 × 6V in series).

Reference Cable: Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.

Voice Link: Built-in intercom system for voice communication between receiver and transmitter operators in MAX and MIN modes, via reference cable.

Indicator Lights: Built-in signal and reference warming lights to indicate erroneous readings.

Temperature Range: -40°C to +60°C (-40°F to +140°F).

Receiver Weight: 6kg (13 lbs.)

Transmitter Weight: 13kg (29 lbs.)

Shipping Weight: Typically 60kg (135 lbs.), depending on quantities of reference cable and batteries included. Shipped in two field/shipping cases.

Specifications subject to change without notification

APEX PARAMETRICS LIMITED
200 STEELCASE RD. E., MARKHAM, ONT., CANADA, L3R 1G2

Phone: (416) 495-1612 Cables: APEXPARA TORONTO Telex: 06-966773 NORDVIK TOR

APPENDIX II

TECHNICAL DATA STATEMENT

LIST OF CLAIMS

L738918	L738936	L738954	L738972
L738919	L738937	L738955	L738973
L738920	L738938	L738956	L738974
L738921	L738939	L738957	L738975
L738922	L738940	L738958	L738976
L738923	L738941	L738959	L738977
L738924	L738942	L738960	L738978
L738925	L738943	L738961	L738979
L738926	L738944	L738962	L738980
L738927	L738945	L738963	L738981
L738928	L738946	L738964	L738982
L738929	L738947	L738965	L738983
L738930		L738966	L738984
L738931		L738967	L738985
L738932		L738968	L738986
L801914			
L801921			
L801928			
L801935			
L801936			
L801937			

B. & C. LTD.

W8408006O4

Ministry of Natural Resources
Ontario

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

42H08SE0006 2.7706 NEWMAN

900

Mining

– Do not use shaded areas below.

(File L738918)

Type of Survey(s)	Township or Area
HEM, Magnetometer	Newman

Claim Holder(s): Grandad Resources Ltd., Seal River Explorations Ltd — Prospector's Licence No.: T 1685; T 1841

Address: 185 Bay Street, Suite 709, Toronto ON M5J 1K6

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
Walker Explorations Ltd.	11 (Day) 10 (Mo.) 84 (Yr.) 2 (Day) 11 (Mo.) 84 (Yr.)	80

Name and Address of Author (of Geo-Technical report): R. Woolham, c/o DMBW, Suite 410, 20 Richmond St.E., Toronto ON, M5C 2R9

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	40
	Geophysical - Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	

RECEIVED
JAN 24 1985
MINING LANDS SECTION

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.
L	738918	60
	19	60
	20	60
	21	60
	22	60
	23	60
	24	60
	25	60
	26	60
	27	60
	28	60
	29	60
	30	60
	31	60
	738932	60
	738936	60
	37	60
	38	60
	39	60
	40	60
	41	60
	42	60
	738943	60

Prefix	Mining Claim Number	Expend. Days Cr.
L	738944	60
	45	60
	46	60
	738947	60
	738954	60
	55	60
	56	60
	57	60
	58	60
	59	60
	60	60
	61	60
	62	60
	63	60
	64	60
	65	60
	66	60
	67	60
	738968	60
	738972	60
	73	60
	74	60
	738975	60

Total number of mining claims covered by this report of work: 63

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
3,780	DEC 31 1984	Acting
	Date Approved as Recorded	Branch Director
	As Revised Statement	

Date	Recorded Holder or Agent (Signature)
11/30/84	†Sharpley

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

F.J. Sharpley 2372 Sinclair Circle
Burlington, ON L7P3C3

Date Certified: 11/30/84

Signature: †Sharpley

Ministry of Natural Resources

Report of Work
(Geophysical, Geological, Geochemical and Expenditures)

Mining Act

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

82 G

Type of Survey(s) | Township or Area

Claim Holder(s) | Prospector's Licence No.

Address

Survey Company | Date of Survey (from & to) Day | Mo. | Yr. | Day | Mo. | Yr. | Total Miles of line Cut

Name and Address of Author (of Geo-Technical report)

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
L	738976	60
	77	60
	78	60
	79	60
	80	60
	81	60
	82	60
	83	60
	84	60
	85	60
	738986	60
	801914	60
	801921	60
	801928	60
	801935	60
	801936	60
	801937	60

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.

RECEIVED
JUL 24 1985
MINING LANDS SECTION

Total number of mining claims covered by this report of work.

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded | Date Recorded | Mining Recorder

Date Approved as Recorded | Branch Director

Date | Recorded Holder or Agent (Signature)

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

Date Certified | Certified by

Ontario

Ministry of Natural Resources

File _____

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey(s) Electromagnetic and Magnetic

Township or Area Newman

Claim Holder(s) Grandad Resources Ltd.
185 Bay St., Suite 709, Toronto, Ont.

Survey Company Walker Exploration/R. Moore

Author of Report R. W. Woolham

Address of Author 20 Richmond St. E., Suite 410
Toronto, Ont.

Covering Dates of Survey Sept 1 to Nov 2, 1984
(linecutting to office)

Total Miles of Line Cut 108 kilometers

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	40
–Magnetometer	20
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Jan 22/85 SIGNATURE: R. W. Woolham
Author of Report or Agent

Res. Geol. _____ Qualifications 63 1154

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

see attached list of claims

TOTAL CLAIMS 63

If space insufficient, attach list

OFFICE USE ONLY

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations Mag - 8000/EM - 2000 Number of Readings Mag-8000/EM-4976

Station interval Mag 12.5 m/EM-25 and 50 m Line spacing 100 m

Profile scale 1 cm = 20%

Contour interval 100 nT

MAGNETIC

Instrument Scintrex MP2

Accuracy – Scale constant See Appendix I

Diurnal correction method Pre-established base stations

Base Station check-in interval (hours) 1.5

Base Station location and value On base line

ELECTROMAGNETIC

Instrument Apex Parametrics Ltd. MaxMin

Coil configuration Horizontal coplanar

Coil separation 100 and 200 m

Accuracy See Appendix I

Method: ☐ Fixed transmitter ☐ Shoot back ☒ In line ☐ Parallel line

Frequency 444 and 1777 Hz
(specify V.L.F. station)

Parameters measured in-phase and quadrature component of secondary field as a percentage of primary field.

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION
RESISTIVITY

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

Power

Electrode array

Electrode spacing

Type of electrode

GRANDAD RESOURCES LIMITED
SUITE 709, 185 BAY STREET
TORONTO ONTARIO
M5J 1K6

January 15,1985

Land Management Branch
Mining Lands Section
Ministry of Natural Resources
Rm 6610, Whitney Block
Queen's Park
Toronto, Ontario
M7A 1W3

Re: Assessment Work
63 Claims - Newman Township
Larder Lake Mining Division

Gentlemen:

Enclosed are two copies of a Technical Report by R. Woolham, geophysicist, covering geophysical surveys on the Mikwam property in Newman Townships, Ontario which we are submitting for assessment work.

Yours truly,

Grandad Resources Limited

F.J. Sharpley

Mining Lands Section

File No 27706

Control Sheet

TYPE OF SURVEY ✓ GEOPHYSICAL

____ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

Cod L.D.

Hurst

Signature of Assessor

85-01-29

Date

1985 03 15

Your File: 604
Our File: 2.7706

Mining Recorder
Ministry of Natural Resources
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

RE: Notice of Intent dated February 12, 1985
Geophysical (Electromagnetic & Magnetometer)
Survey on Mining Claims L 738918, et. al.,
in Newman Township

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3
Phone:(416)965-4888

S. Hurst:mc

cc: Grandad Resources Ltd
Seal River Explorations Ltd
Suite 709
185 Bay Street
Toronto, Ontario
M5J 1K6

cc: R. Woolham
c/o DMBW
Suite 410
20 Richmond Street East
Toronto, Ontario
M5C 2R9

Encl.

cc: F.J. Sharpley
2372 Sinclair Circle
Burlington, Ontario
L7P 3C3

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

cc: Resident Geologist
Kirkland Lake, Ontario

Ministry of Natural Resources
Ontario

Technical Assessment Work Credits

File 2.7706

Date 1985 02 12

Mining Recorder's Report of Work No. 604

Recorded Holder
GRANDAD RESOURCES LTD/SEAL RIVER EXPLORATIONS LTD

Township or Area
NEWMAN TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic 40 days	L 738918 to 931 inclusive 738936 to 947 inclusive 738954 to 968 inclusive 738972 to 986 inclusive 801914-21-28-35-36-37
Magnetometer 20 days	
Radiometric ____ days	
Induced polarization ____ days	
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ days	
Geochemical ____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

5 DAYS MAGNETOMETER
20 DAYS ELECTROMAGNETIC

L 738932

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ Insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical — 80; Geological — 40; Geochemical — 40; Section 77(19)—60:

828 (83/6)

Ministry of
Natural
Resources

Ontario

Feb. 27/85

1985 02 12

Your File: 604
Our File: 2.7706

Mining Recorder
Ministry of Natural Resources
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Sir:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

Whitney Block, Room 6643
Queen's Park
Toronto, Ontario
M7A 1W3

S. Hurst:mc

Encls.

cc: Grandad Resources Ltd
Seal River Explorations Ltd
Suite 709
185 Bay Street
Toronto, Ontario
M5J 1K6

cc: R. Woolham
c/o DMBW
Suite 410
20 Richmond Street East
Toronto, Ontario M5C 2R9

cc: F.J. Sharpley
2372 Sinclair Circle
Burlington, Ontario
L7P 3C3

cc: Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

845

Ministry of Natural Resources

Ontario

Notice of Intent

for Technical Reports

1985 02 12

2.7706/604

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

	M	Ed				M	Ed				
738918	✓	✓			738925-9	✓	✓				
19	✓	✓			60	✓	✓				
20	✓	✓			61	✓	✓				
21	✓	✓			62	✓	✓				
32	✓	✓			63	✓	✓				
23	✓	✓			64	✓	✓				
24	✓	✓			65	✓	✓				
25	✓	✓			66	✓	✓				
26	✓	✓			67	✓	✓				
27	✓	✓			68	✓	✓				
28	✓	✓			912	✓	✓				
29	✓	✓			73	✓	✓				
30	✓	✓			74	✓	✓				
31	✓	✓			75	✓	✓			3	
32	✓	✓			76	✓	✓				
936	✓	✓			77	✓	✓				
37	✓	✓			78	✓	✓				
38	✓	✓			79	✓	✓				
39	✓	✓			80	✓	✓				
40	✓	✓			81	✓	✓				
41	✓	✓			82	✓	✓				
42	✓	✓			83	✓	✓				
43	✓	✓			84	✓	✓				
44	✓	✓			85	✓	✓				
45	✓	✓			86	✓	✓				
46	✓	✓			801914	✓	✓				
47	✓	✓			21	✓	✓				
954	✓	✓			28	✓	✓				
55	✓	✓			35	✓	✓				
56	✓	✓			36	✓	✓				
57	✓	✓			37	✓	✓				
58	✓	✓									

2·7706